DATA SHEET

PDR8000 Portable Digital Repeater

Special ops and security detail teams requiring enhanced Conventional two-way radio network coverage can look to the PDR8000® Portable Digital Repeater as their solution of choice when on the move. Designed with these special teams in mind, the lightweight suitcase is ideal for discreet travel.

Set up the PDR8000 suitcase at a special event or incident to swiftly provide local P25 or analog FM on-scene portable radio coverage. Connect to your Motorola Solutions dispatch console wherever it may be via a V.24 telephone connection or Ethernet IP connection.

Key features and benefits

- All Bands – VHF, UHF, 700 MHz and 800 MHz
- Lightweight construction - less than 28 lbs.
- Rapid deployment with AC or DC power source capability
- Closed case operation
- Patented method to easily connect/swap duplexer and Booster Pack
- Wireline Ethernet IP connection to Motorola GRV 8000 comparator (optional)
- Wireline Ethernet IP connection to consoles supporting Digital Fixed Station Interface Protocol Version 1 (optional)
- Able to use external duplexer
- Local user interface
- Deployment profiles capability (optional)
- End-to-end Encryption supported
- Voting and comparator operation
- Cross patch capability
- Booster Pack provides 50 watts output (optional)

Applications and uses

- Special events
- Interoperability
- Dignitary protection
- In-building coverage
- Natural disaster

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GENERAL SPECIFICATIONS	
Dimensions: Width / Height / Depth (without Antenna)	488 mm (19.2”) x 386 mm (15.2”) x 185 mm (7.3”)
Weight (without duplexer)	27.8 lbs (12.6 kg)
IEC IP Rating During Operation and Storage (Closed Case)	IP65
AC Supply Voltage	100 VAC to 240 VAC, 47 Hz to 63 Hz
AC Current at 120V AC	2.9A
AC Supply Approvals	UL60950-1 and IEC60950-1
DC Supply Voltage	13.8V DC -15% / +20%
DC Current Drain • Standby/Receive • Transmit	 1.2A Max 7.0A Max
Operating Temperature, Full Power Output • 50% duty cycle (case closed) • 100% duty cycle (case open)	 -30 to +55 °C (-22 to 131 °F) -30 to +50 °C (-22 to 131 °F)
Antenna Impedance	50 Ohms
External Connectors • PDR Antenna • RF Input • RF Output • AC Input • DC Input • AUX • V.24 • LAN • Ground	 N female, with Dustcap N female, with Dustcap N female, with Dustcap powerCON TRUE1, NAC3MPX, with Sealing Cover LEMO push pull, EGL.2K.302.CLA, with Dustcap LEMO push pull, EGG.1K.308.CLL, with Dustcap RJ-45 Type, 17-111574, with Dustcap RJ-45 Type, 17-111574, with Dustcap Stainless steel stud, 0.5” long with 10-32 thread
Internal Connectors • Computer Interface	 USB (type B)
Channel Spacing	Digital 12.5 kHz Analog: 12.5 or 25 kHz programmable
Number of Channels With Deployment Profiles Option	64 64 per profile, max 10 profiles

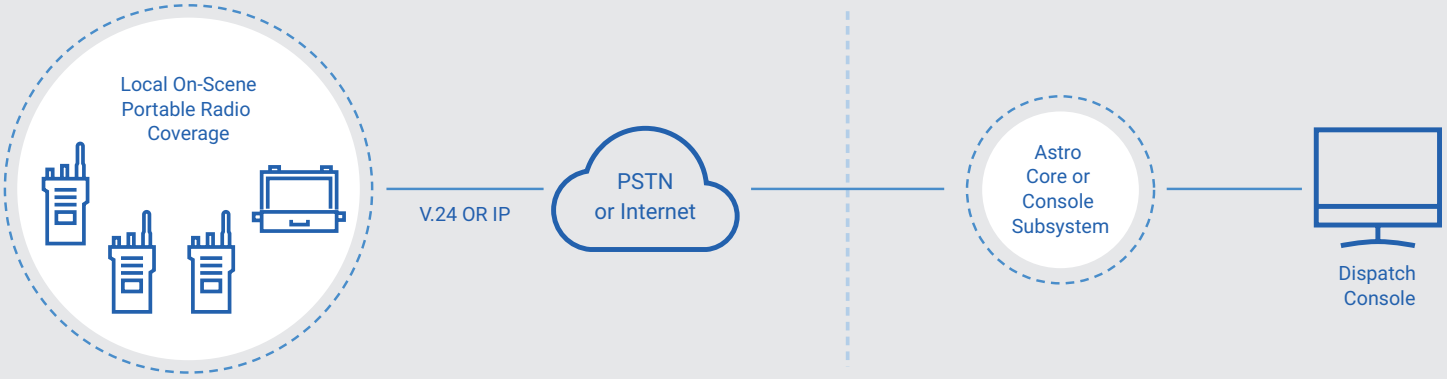
EQUIPMENT TYPE ACCEPTANCE	VHF	UHF	700 MHZ	800 MHZ
FCC	LO6-DVRSVHF	LO6-DVRSUHF	LO6-DVRS700	LO6-DVRS800
Industry Canada	2098B-DVRSVHF	2098B-DVRSUHF	2098B-DVRS700	2098B-DVRS800

TRANSMITTER SPECIFICATION	VHF	UHF	700 MHZ	800 MHZ
Frequency Band [MHz]	136-174	380-430 450-470	768-775	851-869
Power Output @ Antenna Port (without duplexer)	18W	16W	19W	19W
TOT Option	10 seconds to 2550 seconds or Disabled			
Max Spurious Output	-20dBm			
Frequency Stability (-30 °C to +50 °C; +25 °C Ref.)	± 1.5ppm			
FM Hum and Noise 25 kHz	-37dB			

MILITARY STANDINGS COMPLIANCE	MIL-STD-810G
High Temperature	501.6
Low Temperature	502.6
Temperature Shock	503.6
Rain	506.6
Humidity	507.6
Salt Fog	509.5
Vibration	514.7
Shock	516.7
Safety	EN 62368-1

RECEIVER SPECIFICATION	VHF	UHF	700 MHZ	800 MHZ
Frequency Band [MHz]	136-174	380-430 450-470	798-805 768-775	806-824 851-869
Receiver Sensitivity – Digital P25 5% BER (on antenna port without duplexer)	-115 dBm			
Selectivity 12.5kHz / 25kHz	-60dB / -75dB			
Intermodulation	-70dB			
Deviation 12.5 / 25 kHz	+/-2.5 kHz / +/- 5 kHz			

Specifications are typical, measured under nominal conditions and are subject to change without notice



Optional external Booster Pack

The PDR8000 combined with the Booster Pack can provide wider coverage for your mobile users. The Booster Pack is housed in a separate suitcase the same size as the PDR8000. During operation, the PDR8000 automatically detects the presence of the Booster Pack and adjusts its operating parameters to be compatible with the Booster Pack, providing a pre-duplexer output signal of 50 watts.

GENERAL SPECIFICATIONS	
Dimensions: Width / Height / Depth (without Antenna)	488 mm (19.2") x 386 mm (15.2") x 185 mm (7.3")
Weight	23.2 lbs (10.5 kg)
AC Supply Voltage	100 VAC to 240 VAC, 47 Hz to 63 Hz
AC Current at 120V AC	4.0A
AC Supply Approvals	UL60950-1 and IEC60950-1
DC Supply Voltage	13.8V DC -15% / +20%
DC Current Drain • Standby/Receive • Transmit	 0.7A Max 14.3A Max
Operating Temperature,Full Power Output • 50% duty cycle (case closed) • 100% duty cycle (case open)	 -30 to +55 °C (-22 to 131 °F) -30 to +60 °C (-22 to 140 °F)
External Connectors • RF Input • RF Output • AC Input • DC Input • AUX • Ground	 N female, with Dustcap N female, with Dustcap powerCON TRUE1, NAC3MPX, with Sealing Cover LEMO push pull, EGL.2K.302.CLA, with Dustcap LEMO push pull, EGG.1K.308.CLL, with Dustcap Stainless steel stud, 0.5" long width 10-32 thread

EQUIPMENT TYPE ACCEPTANCE	VHF	UHF	700/800 MHZ
FCC	CWWDSDTV100XX	CWWDSDTUL50 CWWDSDTUN50	CWWDSDTJK50
Industry Canada	7291A-DSDTV100XX	n/a	n/a

TRANSMITTER SPECIFICATION	VHF	UHF	700/800 MHZ
Frequency Band (MHz)	136-174	380-430[1] 450-470[1]	768-775[1] 851-869[1]
Power Output @ PDR antenna port without duplexer	50W	50W	50W

[1]Optional 50 W booster not available in UHF and 700/800 MHz in Canada.

Specifications are typical, measured under nominal conditions and are subject to change without notice

To learn more, visit: **www.motorolasolutions.com/pdr8000**

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